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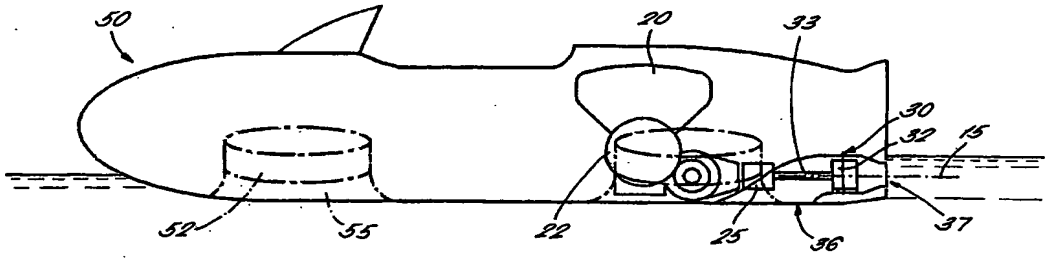
(54) Title: A JET DRIVE FOR AN AMPHIBIOUS VEHICLE



(57) Abstract: Amphibious vehicle (50), with reference to fig. 4, has jet drive (30) packaged behind power train (20, 22), but also configured to produce sufficient thrust for planing, despite drag created by open arches around retractable wheels (52). The ratio of thrust to jet intake length is at least 18kN/m. The ratio of fluid inlet area to fluid outlet area may be between (2.5) and (3.5). The rate of fluid flow through the jet may be 0 to 1.5 m^3/sec. The maximum thrust may be 7700N, from an engine peak power of less than 135kW, with a jet less than 860mm long. The jet drive shaft may be skewed laterally; and may be cantilevered from a bearing in the conduit wall; which bearing may be rotated when the vehicle is driven on roads. Water flow through the jet may be reversible; alternatively, a reversing bucket may be fitted.

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